

WHAT IS CLAIMED IS:

1. A massage system comprising:

5 a motor having an output shaft;
at least one sliding block connected to the output shaft;

10 at least one bellows, such that each bellows is connected to a corresponding one of the sliding blocks and moveable between an extended position and a retracted position, wherein when each bellows is moved from the extended to the retracted position air is expelled from the bellows, and wherein when each bellows is moved from the retracted to
15 the extended position air is taken into the bellows; and

wherein operation of the motor causes each sliding block to move between a first position and a second position, such that in the first position each sliding block compresses
20 a corresponding one of the bellows to the retracted position and in the second position each sliding block releases said corresponding one of the bellows to the extended position.

25 2. The massage system of claim 1, wherein the at least one sliding block comprises a first sliding block and the at least one bellows comprises a first bellows and a second bellows each connected to the first sliding block.

30 3. The massage system of claim 2, wherein when the first sliding block is in the first position the first bellows is in the retracted position and the second bellows is in the extended position and wherein when the first sliding block is in the second position the first bellows is in the extended
35 position and the second bellows is in the retracted position.

4. The massage system of claim 3, wherein the at least one sliding block comprises a second sliding block and the at least one bellows comprises a third bellows and a fourth bellows each connected to the second sliding block.

5. The massage system of claim 4, wherein when the second sliding block is in the first position the third bellows is in the retracted position and the fourth bellows is in the extended position and wherein when the second sliding block is in the second position the third bellows is in the extended position and the fourth bellows is in the retracted position.

6. The massage system of claim 1, wherein the output shaft of the motor comprises at least one eccentrically mounted bearing, such that each bearing is connected a corresponding one of the sliding blocks to move said corresponding one of the sliding blocks between the first and second positions.

7. The massage system of claim 1, wherein the output shaft of the motor comprises at least one eccentrically mounted bearing that rotates about a substantially elliptically shaped slot in a corresponding one of the sliding blocks to move said corresponding one of the sliding blocks between the first and second positions.

8. The massage system of claim 1, wherein the at least one sliding block comprises a first sliding block and a second block and wherein the output shaft of the motor comprises two

eccentrically mounted bearings, such that each bearing is connected a corresponding one of the sliding blocks to move
5 said corresponding one of the sliding blocks between the first and second positions.

9. The massage system of claim 1, wherein the at least
10 one sliding block comprises a first sliding block and a second block and wherein the output shaft of the motor comprises two eccentrically mounted bearings that each rotate about a substantially elliptically shaped slot in a corresponding one of the sliding blocks to move said corresponding one of the
15 sliding blocks between the first and second positions.

10. The massage system of claim 9, wherein the two eccentrically mounted bearings are offset by approximately
20 ninety degrees with respect to each other.

11. The massage system of claim 1, further comprising at least one inflatable bladder connected to each bellows, such that when each bellows is moved from the extended to the
25 retracted position air is expelled from the bellows and enters a corresponding one of the at least one inflatable bladders, and wherein when each bellows is moved from the retracted to the extended position air is extracted from said corresponding
30 one of the at least one inflatable bladders and enters the bellows.

12. The massage system of claim 11, wherein at least one
35 of bellows is connected to more than one inflatable bladder.

13. The massage system of claim 11, wherein at least one
of the inflatable bladders is disposed within an expandable
5 pad.

14. The massage system of claim 1, wherein the output
shaft of the motor is a cam shaft that comprises at least one
cam, such that each cam is connected a corresponding one of
10 the sliding blocks to move said corresponding one of the
sliding blocks between the first and second positions.

15. The massage system of claim 1, wherein the output
15 shaft of the motor is a cam shaft that comprises at least one
cam that rotates about a substantially elliptically shaped
slot in a corresponding one of the sliding blocks to move said
corresponding one of the sliding blocks between the first and
20 second positions.

16. The massage system of claim 1, wherein the at least
one sliding block comprises a first sliding block and a second
block and wherein the output shaft of the motor is a cam shaft
25 that comprises two cams, such that each cam is connected a
corresponding one of the sliding blocks to move said
corresponding one of the sliding blocks between the first and
second positions.

17. The massage system of claim 1, wherein the at least
one sliding block comprises a first sliding block and a second
block and wherein the output shaft of the motor is a cam shaft
that comprises two cams that each rotate about a substantially
35 elliptically shaped slot in a corresponding one of the sliding

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blocks to move said corresponding one of the sliding blocks
between the first and second positions.

5 18. The massage system of claim 17, wherein the two cams
are offset by approximately ninety degrees with respect to
each other.

10 19. A massage system comprising:
 a motor having an output shaft;
 at least one sliding block, wherein each sliding
block is movable between a first position and a second
15 position;

 at least one bellows, such that each bellows is
connected to a corresponding one of the sliding blocks and
moveable between an extended position and a retracted
20 position, wherein when each bellows is moved from the extended
to the retracted position air is expelled from the bellows,
and wherein when each bellows is moved from the retracted to
the extended position air is taken into the bellows;

 wherein the at least one sliding block comprises a
25 first sliding block and the at least one bellows comprises a
first bellows and a second bellows each connected to the first
sliding block;

 a first bearing eccentrically mounted on the output
30 shaft of the motor, wherein operation of the motor causes the
first bearing to rotate about a substantially elliptically
shaped slot in the first sliding block, causing the first
sliding block to move between the first and second positions;
and
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wherein when the first sliding block is in the first position the first bellows is in the retracted position and the second bellows is in the extended position and wherein when the first sliding block is in the second position the first bellows is in the extended position and the second bellows is in the retracted position.

20. The massage system of claim 19 wherein:

the at least one sliding block comprises a second sliding block and the at least one bellows comprises a third bellows and a forth bellows each connected to the second sliding block;

the massage system further comprises a second bearing eccentrically mounted on the output shaft of the motor, such that operation of the motor causes the second bearing to rotate about a substantially elliptically shaped slot in the second sliding block, causing the third sliding block to move between the first and second positions; and

when the second sliding block is in the first position the third bellows is in the retracted position and the fourth bellows is in the extended position and wherein when the second sliding block is in the second position the third bellows is in the extended position and the fourth bellows is in the retracted position.

21. A massage system comprising:

a motor having an output shaft that is a cam shaft;
at least one sliding block, wherein each sliding block is movable between a first position and a second position;

at least one bellows, such that each bellows is
connected to a corresponding one of the sliding blocks and
5 moveable between an extended position and a retracted
position, wherein when each bellows is moved from the extended
to the retracted position air is expelled from the bellows,
and wherein when each bellows is moved from the retracted to
10 the extended position air is taken into the bellows;

 wherein the at least one sliding block comprises a
first sliding block and the at least one bellows comprises a
first bellows and a second bellows each connected to the first
sliding block;

15 wherein operation of the motor causes a first cam on
the cam shaft to rotate about a substantially elliptically
shaped slot in the first sliding block, causing the first
sliding block to move between the first and second positions;
20 and

 wherein when the first sliding block is in the first
position the first bellows is in the retracted position and
the second bellows is in the extended position and wherein
when the first sliding block is in the second position the
25 first bellows is in the extended position and the second
bellows is in the retracted position.

 22. The massage system of claim 21 wherein:

30 the at least one sliding block comprises a second
sliding block and the at least one bellows comprises a third
bellows and a forth bellows each connected to the second
sliding block;

35 operation of the motor causes a second cam on the
cam shaft to rotate about a substantially elliptically shaped

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slot in the second sliding block, causing the third sliding block to move between the first and second positions; and

5 when the second sliding block is in the first position the third bellows is in the retracted position and the fourth bellows is in the extended position and wherein when the second sliding block is in the second position the
10 third bellows is in the extended position and the fourth bellows is in the retracted position.

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